

WHAT IS CLAIMED IS:

1. A method for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, the method comprising the steps of:

5 determining a threshold access value for each node of said plurality of nodes;

 determining a level of access value for each node of said plurality of nodes;

10 comparing said level of access value for a first node of said plurality of nodes with said threshold access value for said first node of said plurality of nodes, and if said level of access value for said first node is less than said threshold access value for said first node, merging said first node with a related node arranged laterally to said first node in said hierarchical arrangement; and

15 comparing said level of access value for said first node of said plurality of nodes with said threshold access value for a second node of said plurality of nodes, and if said level of access value for said first node is greater than said threshold access value for said second node, promoting said first node to a higher level in said hierarchical arrangement than said second node, and if said level of access value for said first node is less than said threshold access value for said second node, demoting said first node to a lower level in said hierarchical arrangement than said second node.

100-516-4000
TODAY'S SPECIAL

2. The method of Claim 1, wherein said threshold access value comprises a threshold user access value, said level of access value comprises a level of user access value, and said user includes at least a person,
5 automatic browsing device, or data collection device.

3. The method of Claim 1, wherein said level of access value for each node comprises usage of information content associated with each node.
10

4. The method of Claim 1, wherein the step of determining a level of access value for each node comprises determining a sum of user access requests to each node and at least one child of said each node plus a sum of searches or queries performed wherein a result of
15 said searches or queries includes at least one of said each node or a content of said at least one of said each node.

5. The method of Claim 1, wherein the step of merging said first node with a related node arranged laterally to said first node in said hierarchical arrangement comprises retiring said first node and combining a content of said first node with a content of
20 said related node.
25

6. The method of Claim 1, wherein said related node arranged laterally to said first node comprises a node arranged in parallel and in a same category with
30 said first node.

7. The method of Claim 1, wherein said plurality of nodes arranged hierarchically comprises a tree structure.

5 8. The method of Claim 1, wherein said taxonomy comprises a top-down multilevel taxonomy.

10 9. The method of Claim 1, wherein said related node is identified by a proximity feature associated with said first node and said related node.

15 10. The method of Claim 1, wherein said level of access value comprises at least a sum of IP addresses computed for a predetermined interval of time.

11. The method of Claim 1, wherein said level of access value comprises at least a sum of different IP addresses computed for a predetermined interval of time.

20 12. The method of Claim 1, wherein said level of access value comprises at least a sum of different devices' IDs computed for a predetermined interval of time.

25 13. The method of Claim 1, wherein said taxonomy comprises a product catalog database.

14. The method of Claim 1, wherein said taxonomy comprises a WWW directory.

30 15. The method of Claim 1, wherein said taxonomy comprises advertisement pricing information.

16. The method of Claim 1, wherein said taxonomy comprises a dynamic pricing map based on usage.

5 17. The method of Claim 1, wherein said taxonomy comprises a call center resources allocation map based on usage.

FOR OFFICIAL USE ONLY

if said actual usage value for said first node is greater than said threshold usage value for said second node, promoting said first node to a higher level than said second node in a hierarchy associated with said dynamic taxonomy.

20. The method of Claim 18, further comprising the steps of:

comparing said actual usage value for said first node of said plurality of nodes with said threshold usage value for a second node of said plurality of nodes; and

if said actual usage value for said first node is less than said threshold usage value for said second node, demoting said first node to a lower level than said second node in a hierarchy associated with said dynamic taxonomy.

21. Logic encoded in media for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, and operable to:

determine a threshold access value for each node of
5 said plurality of nodes;

determine a level of access value for each node of
said plurality of nodes;

compare said level of access value for a first node
of said plurality of nodes with said threshold access
10 value for said first node of said plurality of nodes, and
if said level of access value for said first node is less
than said threshold access value for said first node,
merge said first node with a related node arranged
laterally to said first node in said hierarchical
15 arrangement.

22. The logic of Claim 21, further operable to:

compare said level of access value for said first
node of said plurality of nodes with said threshold
20 access value for a second node of said plurality of
nodes; and

if said level of access value for said first node is
greater than said threshold access value for said second
node, promote said first node to a higher level in said
25 hierarchical arrangement than said second node.

23. The logic of Claim 21, further operable to:

compare said level of access value for said first
node of said plurality of nodes with said threshold
access value for a second node of said plurality of
nodes; and

5

if said level of access value for said first node is
less than said threshold access value for said second
node, demote said first node to a lower level in said
hierarchical arrangement than said second node.

FOOTNOTES

24. A computer-implemented system for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, comprising:

a processor; and

5 a data storage unit coupled to said processor, said data storage unit operable to store said taxonomy, said processor in association with said data storage unit operable to:

10 determine a threshold access value for each node of said plurality of nodes;

determine a level of access value for each node of said plurality of nodes;

15 compare said level of access value for a first node of said plurality of nodes with said threshold access value for said first node of said plurality of nodes, and if said level of access value for said first node is less than said threshold access value for said first node, merge said first node with a related node arranged laterally to said first node in said hierarchical arrangement; and

20 compare said level of access value for said first node of said plurality of nodes with said threshold access value for a second node of said plurality of nodes, and if said level of access value for said first node is greater than said threshold access value for said second node, promote said first node to a higher level in said hierarchical arrangement than said second node, and if said level of access value for said first node is less than said threshold access value for said second node,

25

30 demote said first node to a lower level in said hierarchical arrangement than said second node.

25. The system of Claim 24, wherein said level of access value for each node comprises usage of information content associated with each node.

5 26. The system of Claim 24, wherein determining a level of access value for each node comprises determining a sum of user access requests to each node and at least one child of said each node plus a sum of searches performed wherein a result of said searches includes at
10 least one of said each node or a content of said at least one of said each node.

27. The system of Claim 24, wherein merging said first node with a related node arranged laterally to said
15 first node in said hierarchical arrangement comprises retiring said first node and combining a content of said first node with a content of said related node.

28. The system of Claim 24, wherein said related
20 node arranged laterally to said first node comprises a node arranged in parallel and in a same category with said first node.

29. The system of Claim 24, wherein said plurality
25 of nodes arranged hierarchically comprises a tree structure.

30. The system of Claim 24, wherein said taxonomy
comprises a top-down multilevel taxonomy.

31. The system of Claim 24, wherein said related node is identified by a proximity feature associated with said first node and said related node.

5 32. The system of Claim 24, wherein said level of access value comprises at least a sum of IP addresses computed for a predetermined interval of time.

10 33. The system of Claim 24, wherein said taxonomy comprises a product catalog database.

 34. The system of Claim 24, wherein said taxonomy comprises a WWW directory.

15 35. The system of Claim 24, wherein said taxonomy comprises advertisement pricing information.

 36. The system of Claim 24, wherein said taxonomy comprises a dynamic pricing map based on usage.

00331-1300
T0322T "S T E E O O T

37. A system for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, comprising:

means for determining a threshold access value for
5 each node of said plurality of nodes;

means for determining a level of access value for
each node of said plurality of nodes;

means for comparing said level of access value for a
first node of said plurality of nodes with said threshold
10 access value for said first node of said plurality of
nodes, and if said level of access value for said first
node is less than said threshold access value for said
first node, merging said first node with a related node
arranged laterally to said first node in said
15 hierarchical arrangement; and

means for comparing said level of access value for
said first node of said plurality of nodes with said
threshold access value for a second node of said
plurality of nodes, and if said level of access value for
20 said first node is greater than said threshold access
value for said second node, promoting said first node to
a higher level in said hierarchical arrangement than said
second node, and if said level of access value for said
first node is less than said threshold access value for
25 said second node, demoting said first node to a lower
level in said hierarchical arrangement than said second
node.